August 21, 2003

Mary L Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2d Fl.
Boston, MA

Re: KeySpan, D.T.E. 03-40

Dear Secretary Cottrell:

Enclosed for filing please find responses on behalf of the Attorney General to Record Requests by the Department and the Company. Thank you.

Sincerely,

Edward G. Bohlen
Assistant Attorney General

Enclosures

BOSTON GAS COMPANY
D.T.E. 03-40

RESPONSES ON BEHALF OF THE ATTORNEY GENERAL TO RECORD REQUESTS
OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY AND KEYSPAN

The Attorney General
D.T.E. 03-40
Record Request: D.T.E.72
Date: August 21, 2003

Request: Assuming the Department were to approve a ten-year PBR plan for Boston Gas, if you can come up with an earnings-sharing mechanism which you think will be appropriate to go with that ten-year plan. Please give reasons for all your calculations and proposals. Also include any other areas of the company's proposal which you think should be modified if the Department were to approve a ten-year PBR plan.

Response:

1) Basic Inflator--GDP-PI

Rationale: there is no definitive evidence that nationwide gas distribution utility cost increases are different from the GDP-PI; the primary reason why there might be a difference is the higher capital intensity of the gas industry, and the impact of this will depend on changes in the cost of capital, which are uncertain. The GDP-PI is an easily available reference, and has worked successfully in other instances, including Boston Gas and Berkshire Gas.

2) Consumer Dividend - 1%

Rationale: The previous KeySpan PBR plan demonstrated that 0.5% "worked"; mergers should make even greater increases in efficiency possible; this will provide a strong incentive to reduce costs, and a meaningful share of benefits to customers; the Company will still have the benefit of avoiding rate cases, and elimination of regulatory lag. For a longer term PBR, the higher the Consumer Dividend, the more likely the PBR will provide benefits to customers.

3) 1% Earnings sharing mechanism - 2 tiered

a) if earnings exceed by more than 200 basis points but less than 400 – difference would be split 50/50 between Company and ratepayers
b) If earnings are more than allowed by more than 400 basis points, customers get 75% of the overearnings

Rationale: If the Company can reduce costs by considerably more than the Consumer Dividend, the Earnings Sharing Mechanism can help customers get a piece of the additional efficiencies.

The deadband should reflect the level of consumer dividend–a narrower band for consumer dividends less than the recommended 1% and wider if more than 1%. The earnings sharing mechanism based on the 1% consumer dividend should provide a 200 basis point dead band for earnings over the Company's allowed return of common equity. Earnings over that 200 basis point dead band should be shared 50 / 50 with customers. This would provide customers with some guarantee of some benefit as the result of mis-specification of the factors used in the price cap formula.

The should be no sharing mechanism for earnings less than the Company's allowed return on common equity. Boston Gas Company, like many of the utilities in Massachusetts, is now part of a much larger holding company, KeySpan, which has many affiliates that the Company will do business with in the future, including the service companies, and finance companies. Many of these affiliate arrangements are outside the purview of the Department and cause significant distortion to the Company's earnings results. As such, the Company can, and has caused its reported earnings to change depart significantly from those that would exist had the Company been on a stand alone basis. The Company's recent Annual Returns to the Department indicate just how easy it is to report negative earnings "with the stroke of a pen." The amount of work that would be required by the Department to de-tangle and audit the earnings from year-to-year would, in effect, turn each price cap into a mini-rate case. Therefore, the Department should not allow any earnings sharing for those earnings below the allowed return on common equity.

Furthermore, the Company's PBR plan should not be effectuated with the Company's Pension / PBOPs reconciliation adjustment mechanism. The productivity factor that the Department uses to set rates under the price cap formula already includes the effects of pensions and PBOPs costs, since those costs effect the Gross Domestic Product Price Index. Allowing another adjustment to the Company's rates in the form of a separate reconciliation mechanism for these costs would double-count the effects of any changes in those costs. Therefore, to the extent that the Department approves annual price cap increases, it must deny the pensions and PBOPs reconciliation adjustment mechanism.

The two tiered formula is recommended as appropriate as a component of a longer term PBR, because over a longer period of time the formula could result in rates that differ significantly from costs. The basic bandwidth allows the Company to benefit from moderate cost decreases.

4) Z Factor - see response to DTE RR-74 and 75.

The Attorney General
Respondent: Smith
D.T.E. 03-40
Record Request: D.T.E.73
Date: August 21, 2003

Request: Provide the workpapers for DTE-1-2 and how you developed that 1.3 percent.

Response: See attached.

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| | | **DTE Record Request 73** | | | |
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| | | Rates expressed in index form | | | |
| | | | | | |
| | | BG PBR | Incorrect | BG PBR | |
| | Correct" | GDP 2.5% | start point | GDP 2.5% | |
| Initial year index | 1.000 | | 1.010 | | |
| increase 1 | 1.027 | 2.70% | 1.037 | 2.70% | |
| increase 2 | 1.055 | 2.70% | 1.065 | 2.70% | |
| increase 3 | 1.083 | 2.70% | 1.094 | 2.70% | |
| increase 4 | 1.112 | 2.70% | 1.124 | 2.70% | |
| increase 5 | 1.142 | 2.70% | 1.154 | 2.70% | |
| | | | | | |
| Increase due to overstatement | | | 1.14% | | |
| | | | | | |
| With GDP-PI at 2.5% and Boston Gas formula, a 1% overstatement of rev. req. | | | | | |
| increase of 15.5% by fifth year, or 1.14% over "correct" increase | | | | | |
| | | | | | |
| | | | | | |
| | | Normal gas | | Incorrect | |
| | | inflation | | formula | |
| | 1.000 | | 1.000 | | |
| | 1.025 | 2.50% | 1.030 | 3.00% | |
| | 1.051 | 2.50% | 1.061 | 3.00% | |
| | 1.077 | 2.50% | 1.093 | 3.00% | |
| | 1.104 | 2.50% | 1.126 | 3.00% | |
| | 1.131 | 2.50% | 1.159 | 3.00% | |
| | | | | | |
| Increase due to overstatement of inflation | | | 2.79% | | |
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The Attorney General
D.T.E. 03-40
Record Request: D.T.E.74
Date: August 21, 2003

Request: If you familiarize yourself with the company's proposal with regard to the Z factor in the price cap formula, please state whether you accept the company's proposal or you disagree with what the company is proposing. Also, please discuss the threshold for the recovery of exogenous costs as proposed by the company, whether you think that is acceptable.

Response:
Generally, the Department should make the exogenous factor requirements conform with those that it has found for the other companies, as was provided for by the Department in the Berkshire Gas Company and the Colonial Gas Company exogenous factor analysis and findings. These terms appear to have provided risk sharing between the Company and its customers.

Furthermore, conforming to the existing precedent would eliminate the new capital replacement provision that the Company's has proposed here. There should not be a blanket provision to allow cast iron replacement, or even cast iron replacement that is claimed to be extraordinary, because the basic formula applies the inflation factor to capital costs and to depreciation. Capital replacement would only warrant special treatment if it was necessary and in excess of the amount of capital cost increase that was allowed for in the formula. This is a complicated issue, which is why it is appropriate to address in a rate case setting rather than in a formulaic manner.

Rate case expense should always be subtracted before inflating rates, since this is a fixed amount to be recovered.

The Department should also address merger savings. Expense reductions related to any change in allocation of costs between Keyspan utilities as the Essex and Colonial rate freezes end should be included in the Z factor. That is, in the year in which the merger ends, costs that were "reallocated" back to Boston Gas should be removed. The amount of costs to be removed should be the amount included in revenue requirements in this case, inflated by the PBR inflation that has occurred. See also, RR-DTE-AG-75.

The Attorney General
D.T.E. 03-40
Record Request: D.T.E.75
Date: August 21, 2003

Request: Explain how you would modify the Company's proposed PBR plan in light of the cost impact on the ratepayers of the three companies of the termination of the rate freezes of Essex County Gas Company and Colonial Gas Company.

Response:

The Department should remove the non-incremental costs of providing service to Essex County Gas and Colonial Gas before setting rates for Boston Gas Company, as was discussed in Mr. Effron's testimony. However, if the Department allows such costs to be included in the Company's rates, an adjustment should be made to its rates to reflect the termination of the freeze period. The Department should take the pro forma amount of the claimed "non-incremental" costs included in rates, which would be the test year amount plus the associated inflation added as a result of the inflation adjustment, and apply the compounded effects of the annual price cap increases to determine an amount embedded in the rates at the end of each price freeze. This amount should then be deducted from Boston Gas Company's price cap rates before applying the price cap factor on a going forward basis at the end of the rate freeze period, whether or not Essex or Colonial file for new distribution rates at that time. The adjustment that must be made is not a trivial calculation. To do it correctly the Department should establish, in this case, the embedded component, on a cents per therm basis, for each rate class for the Colonial and the Essex non-incremental costs included in the approved distribution cast off rates. The class specific rate would be the amount inflated by the PBR factor and then removed from each class's rates at the end of the rate freeze.

The Attorney General
Respondent: Smith
D.T.E. 03-40
Record Request: D.T.E.76
Date: August 21, 2003

Request: For the productivity study and cost-performance study, for each study, summarize the reasons why you think the study should be accepted or rejected; in some other form put the things together.

Response:
My testimony discussed multiple problems with both the PEG productivity study and the PEG econometric cost study.

Productivity study

The sample of NorthEast (NE) utilities, while encompassing a large number of customers, has not been demonstrated to be a representative sample. While it has been hypothesized that the smaller utilities that have been excluded are likely to be higher cost, there is no evidence that this is the case, and also higher cost levels do not mean that their productivity growth has therefore been slow. The Company has not shown by convincing evidence that productivity growth is actually much different in NE than in nation. Some of the excluded utilities, such as Bay State Gas, are not smaller.

In this case there is no comparison between productivity growth in the NE and the nation; the Company justifies relying on the NE study by pointing to evidence presented in the previous case; however in the previous case, the productivity studies treated as output only number of customers, and those studies suffered from at least all of the same difficulties identified in this case. Those include:

? There are errors in cost data in the first and last years for some companies. There is evidence on the record that understating cost in the first year and/or overstating cost in the last year will have the effect of reducing productivity growth "measured" by the study. In response to AG discovery, PEG agreed that several years of data were in error, and that correcting them made some difference. Another initial year cost value which was very low relative to subsequent years was discussed in response to a record request as due to an extraordinary change in the company organization. If that data point were normalized to the later company operations, it would also increase the measured productivity growth.

? Another problem is the period of study, which is from 1990 to 2000, even though this did not correspond perfectly to the business cycle. Also, growth during this cycle was higher than normal. Moreover, PEG has not demonstrated that the period of study, which they maintain represents normal productivity growth for the economy, corresponds to a period

of normal productivity growth for the gas industry. In fact, PEG maintains that it is only important that the periods studied be identical, even though factors other than the business cycle, such as the relative price of oil and gas, will influence gas utilization. A lower rate of utilization at the end of the period than at the beginning will depress measured productivity.

? The largest single problem with the productivity study is the estimation of capital cost. The vintaging that is supposed to make plant of different vintages comparable will tend to understate the value of older plant, since it acts as if the plant value in 1983 was the same age and had been installed at the same rate for all utilities. PEG does not even know the average age of plant by utility. The fact that Boston Gas has the second highest percentage of cast iron mains of even the national sample (used in the econometric cost study) suggests that it has one of the oldest plants. If the 1983 plant was understated, the base year of the productivity study will also be understated, and plant growth will appear to be at a higher rate than if the initial year were higher. The Handy-Whitman index used also does not recognize the different proportions of plant in the different utilities.

Econometric cost study

The econometric cost study suffers from a number of problems:

1) The econometric cost study, which studies 43 nationwide utilities, does not include a number of variables which probably influence cost, and the lack of these variables is likely to make Boston Gas appear a more efficient performer. These include density and the number of customers whose addition requires constructing new mains.

2) The econometric cost study is influenced by the same capital measurement problem described with regard to the productivity study. Boston Gas will appear to be a low cost utility because the value of its old mains is understated.

3) Another problem in the capital cost component is that it includes actual taxes. Relative to its capital plant cost, Boston Gas pays a much lower amount of taxes than most of the utilities in the Northeast study. If this is also true regarding the national study, it will be another factor that will make Boston Gas appear to be low cost. Clearly a utility should not get identified as an efficient performer because it has a lower tax rate than others in the study.

4) There may also be a problem with the prediction of non-labor O&M. In his final day of testimony, Dr. Kaufman stated that actual franchise[1] taxes are included with non-labor O&M costs. These are costs which do not reflect utilities' efficiency or non-

[1] In oral testimony, I misstated these actual taxes as "payroll" rather than "franchise", but the problem is the same in any case.

efficiency. Including them may also cause a distortion in the coefficients produced by the model. If there is a wide divergence between the average amount (actually, the proportion compared to other non-labor O&M) of franchise taxes paid between utilities and the amount of such taxes paid by Boston Gas, Boston Gas' non-capital costs will not be predicted accurately.

My conclusions, on the basis of the above, are:

- ? that the study of NE productivity growth is not accurate enough to predict the normal future growth in gas utility productivity, and that it probably understates productivity growth; and
- ? that the econometric study is based on a total estimate of capital cost that contains numerous inaccuracies, includes in non-capital costs some costs that are not under the utility's control, does not reflect some important elements of cost causation, and therefore does not prove that Boston Gas is an efficient performer.

The Attorney General
Respondent: Smith
D.T.E. 03-40
Record Request: KEDNE-2
Date: August 21, 2003

Request: The information relied on by Ms. Smith for her belief that the pace of technological innovation in the gas industry may be greater over the next five years than it was in the 1990s.

Response:
See information attached.